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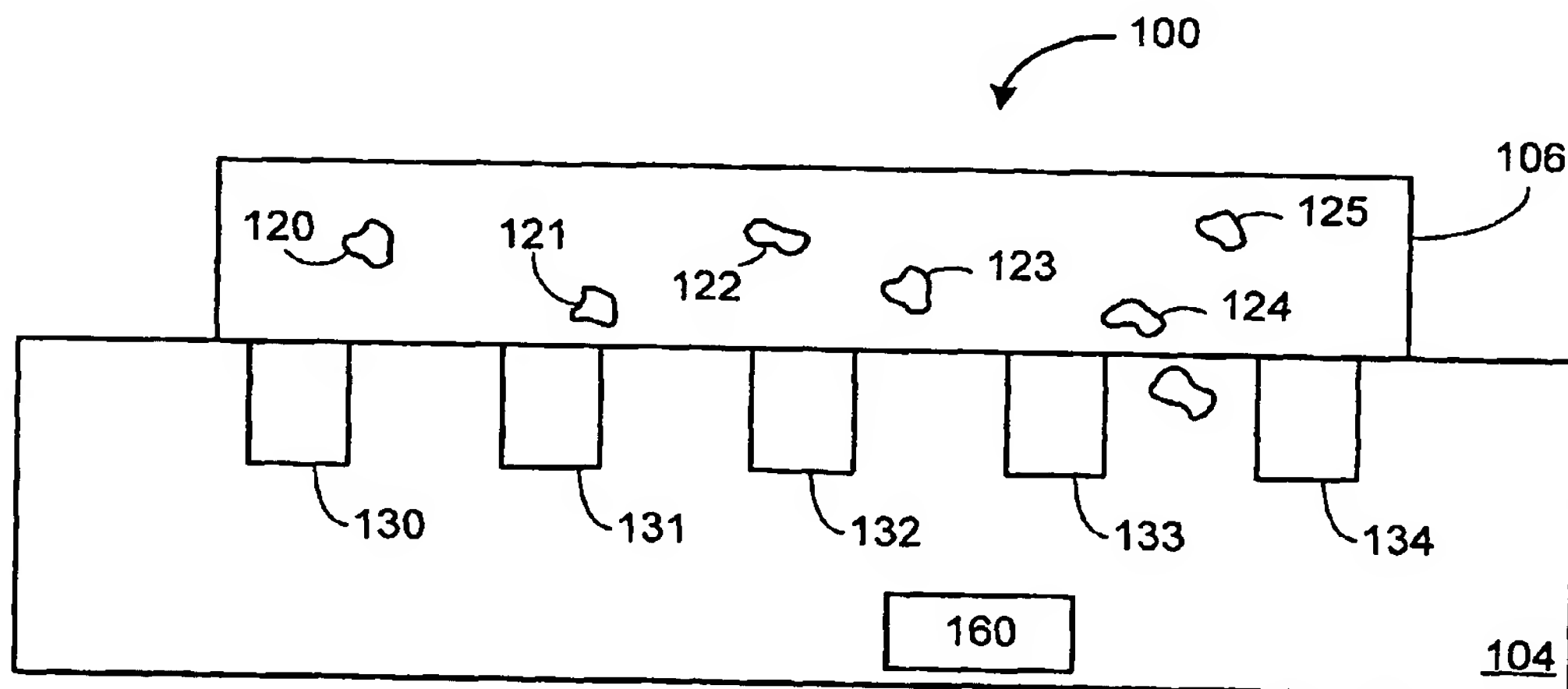
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[Continued on next page]

(54) Title: TAMPER-RESISTANT PACKAGING AND APPROACH



(57) Abstract: A tamper-resistant packaging approach protects non-volatile memory (108). According to an example embodiment of the present invention, a package (106) having a plurality of magnetic particles (120-125) therein is arranged with an integrated circuit device (100) to cause a plurality of magnetically-responsive circuit nodes (130-134) to take on magnetic states. Each magnetic state is detected as a logic state, and then compared with a real-time logic state of the magnetically-responsive circuit nodes and, in response to a stored logic state being different from a real-time logic state, package tampering is detected. In one instance, tampering is detected when the magnetic state of one of the magnetically-responsive circuit nodes is altered as a portion of the package is removed. The detected tampering may alter a characteristic of the integrated circuit, such as by altering stored data or setting a tamper flag that indicates the package has been tampered with.



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A. CLASSIFICATION OF SUBJECT MATTER

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Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PATENT ABSTRACTS OF JAPAN vol. 008, no. 278 (P-322), 19 December 1984 (1984-12-19) & JP 59 144094 A (HITACHI SEISAKUSHO KK), 17 August 1984 (1984-08-17) abstract	1, 15, 19
Y	----- US 2001/033012 A1 (KOEMMERLING OLIVER ET AL) 25 October 2001 (2001-10-25) paragraph '0097! - paragraph '0117!	1, 15, 19
A	paragraph '0218! - paragraph '0219!	2, 8-14, 16-19
A	----- US 2002/008988 A1 (LENSSEN KARS-MICHIEL HUBERT ET AL) 24 January 2002 (2002-01-24) the whole document	1-20
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	<p>PATENT ABSTRACTS OF JAPAN vol. 009, no. 093 (P-351), 23 April 1985 (1985-04-23) & JP 59 221631 A (FUJITSU KK), 13 December 1984 (1984-12-13) abstract</p> <p>-----</p>	1-20

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